

CARABIDÆ FROM TROPICAL AUSTRALIA.

(NEW GENERA AND SPECIES, NOTES AND SYNONYMY, AND SYNOPTIC TABLES. TRIBES *SCARITINI*, *HARPALINI*, *ODACANTHINI*, *LEBIINI*, AND *HELLUONINI*).

BY THOMAS G. SLOANE.

Tribe **Scaritini**.

Genus *CLIVINA*.

CLIVINA BREVISTERNA Sl., var. *MAJOR*, n.var.

Allied to *C. brevisterna* Sl., but differing by larger size; prothorax strongly narrowed to apex; elytra with striæ less coarsely punctate towards base, obsolete towards apex, interstices equally convex at base but depressed towards apex, third and fifth interstices not raised into ridges towards apex. Undersurface similar as regards pro-episterna, metepisterna, and comparative length of posterior coxæ in comparison with distance between median and posterior coxal cavities. Length, 17; head, 3 across eyes; prothorax, 4.5×4.75 , apex 3; elytra, 10×5 mm.

Hab.—Northern Territory. Types in National Museum, Melbourne. Several specimens, sent by Mr. J. A. Kershaw, ticketed "Flooded area, King River, N.T.; W. McLennan; 22.12.15."

LACCOSCAPHUS DODDI Sl., var. *TRIORDINATA*, n.var.

Oval; elytra with three rows of foveæ on each; anterior tibiae 3-dentate; black. Length, 12.2; breadth, 4.5 mm.

Differs from the typical form of *L. doddi* by shape less convex; elytra less convex, more depressed on disc, less roundly and strongly declivous on sides, three (not four) rows of foveæ on each elytron (the row next the suture wanting).

Hab.—Northern Territory. Type in National Museum, Melbourne,

One specimen ticketed "Flooded area, King River, N.T.; W. McLennan; 24.12.15." Among the specimens sent by Mr. Kershaw, as taken at the same place and time, was a specimen of *L. doddi* of typical form. In *L. doddi*, the number of foveæ in the juxta-sutural row varies (in one of my specimens there are only two foveæ); therefore it is possible they may be altogether wanting sometimes; but, even if this be the case, a varietal name for the form with only three rows of foveæ on each elytron will be convenient.

Genus *CARENUM*.*

CARENUM FULGIDUM, n.sp.

Parallel-oval, subcylindrical. Head large; frontal sulci long, divergent backwards; median space at base filling all interval between sulci; suborbital channels to receive antennæ divided longitudinally in middle by an oblique ridge; maxillary palpi moderately, labial palpi very widely securiform, penultimate joint of labial short, stout: prothorax broader than long, lobate at base; anterior angles advanced, posterior angles rounded; two marginal setigerous punctures on each side: elytra oval, quadripunctate; inflexed margin narrow behind first ventral segment; humeral angles dentate: anterior tibiæ bidentate, apical plate of lower side prominent beneath insertion of tarsus and with a seta on inner side. Head æneous, clypeus, middle of median frontal space and sides of lateral frontal spaces purplish-black; pronotum æneous (cupreous along anterior transverse impression and towards base), disc on each side of suture and anterior margin before transverse impression purple-black; elytra cupreous, (æneous in some lights) purple-black on disc; undersurface of head viridescent on each side; prosternum black in middle, green on each side, episterna green; mesosternum, metasternum, and legs black; ventral segments green, black in middle.

Head convex (3.7 mm. across eyes), transversely impressed behind frontal spaces; frontal sulci long, lightly sinuate; clypeus

* *Carenum floridum*, nom.nov., for *C. lepidum* Sloane, 1916. The name *C. lepidum* had been used by me for a species of *Carenum* in 1889. The name *C. floridum* is now proposed to replace that of the second species so named.

convex, median part wide, declivous, intermediate angles narrow, prominent; preocular sulci well-defined; eyes deeply inclosed behind, convex, most prominent near base, obliquely narrowed forward; orbits prominent, sloping strongly to head; labrum short. Prothorax convex, declivous to base, subparallel on sides (3.4×4.1 mm.); basal curve short, rounded on each side, strongly sinuate on each side of the well-defined basal lobe; apex truncate between anterior angles; border narrow, reflexed, a little wider and prominent at anterior angles. Elytra oval (6.5×4.2 mm.), depressed on disc, strongly roundly declivous on sides, strongly declivous on base above peduncle, very declivous to apex; border narrow, upturned in a short, prominent, horn-like process at humeral angles; three or four punctures on base of each elytron, the inner one near suture; a row of rather closely placed punctures along lateral margins. Intercostal point of prosternum rounded, unisetose on each side. Ventral segments 3-5 bipunctate, apical segment non-foveate on upturned edge. Length, 13.5; breadth, 4.2 mm.

Hab.—Northern Territory. Type in National Museum, Melbourne.

A single specimen was sent to me by Mr. J. A. Kershaw, of the National Museum, Melbourne, for identification, ticketed "Flooded area, King River, N.T.; W. McLennan; 24.12.15." It belongs to the *C. quadripunctatum*-group; in general appearance it resembles *C. sumptuosum* Westw., but differs very decidedly by smaller size, prothorax with basal lobe far more strongly defined by the lateral sinuosities, only two (not three) marginal setigerous punctures on each side, border projecting strongly at each humeral angle in the form of a short, horn-like prominence. It is allied to *C. nitidipes* Sl., from which it differs by the coppery tints on head, prothorax, and elytra, black legs, broader form, much more strongly dentate humeral angles of elytra, &c.

CARENUM BELLUM, n.sp.

Elongate, parallel. Head transversely impressed behind; frontal sulci long, deep, divergent posteriorly; suborbital scrobes to receive antennæ short, single; two supraorbital setæ on each

side; maxillary palpi widely, labial palpi very widely securiform, penultimate joint of labial palpi short, stout: prothorax parallel on sides, lobate; anterior angles prominent; two marginal setigerous punctures on each side: elytra not perceptibly wider than prothorax, depressed on disc, impunctate; humeral angles shortly dentate; inflexed margin narrow behind first ventral segment; anterior tibiæ bidentate. Nitid, head black, with bright green reflections on frontal lateral spaces, across occiput, in transverse impression, and on sides of gulæ; prothorax black, with wide bright green lateral margins becoming æneous at posterior curve; elytra bright green, purple-black on disc (along suture) and narrowly along basal, lateral, and apical margins; inflexed margin black with faint greenish tinge; undersurface and legs black; pro-episterna and ventral segments 3-6 with viridescent tints.

Head large (3.3 mm. across eyes), convex, constricted behind eyes; frontal spaces convex, middle space filling all the interval between frontal sulci, its posterior margin strongly defined by a transverse impression, lateral spaces narrow and strongly raised behind, defined externally for length of eyes by a deep supra-ocular sulcus; labrum small; clypeus roundly declivous, median part obsoletely trisinate, intermediate angles short, obtuse; submentum strongly raised from gulæ, foveate on each side behind genæ. Prothorax as long as broad (3.35 × 3.35 mm.), convex, declivous to basal sinuosities; sides parallel, rounded at posterior angles, strongly sinuate on each side of basal lobe; anterior margin truncate, anterior angles advanced, bordered; border very narrow. Elytra of about same width as prothorax (6.5 × 3.4 mm.), subparallel on sides, depressed on disc, strongly and roundly declivous on sides; suture strongly impressed; border narrow, thickened towards apex, upturned in a short, subacute process at humeral angles; a closely placed row of punctures along sides; about six punctures on base of each elytron (five in a transverse row, the remaining one placed before this row towards lateral border). Ventral segments 3-5 bipunctate. Anterior tibiæ strongly bidentate; apical plate without a subdentiform prominence below tarsus. Length, 13; breadth, 3.4 mm.

Hab.—Northern Territory. Type in National Museum, Melbourne.

A single specimen of this elegant and distinct species was sent to me by Mr. J. A. Kershaw, of the National Museum, Melbourne, for description, ticketed "Flooded area, King River, N.T.; W. McLennan; 24.12.15." In facies it resembles *C. splendidum* MacL., but it is not closely allied to that species (some differences are form of head, facial sulci deep and extending backwards beyond base of eye, suborbital antennal grooves short, single; elytra with several punctures on each side of base, the row of punctures along margin not few and wide apart). It probably has more affinity towards *C. longulum* Sl., than to any other described species, but differs by smaller size, elytra impunctate, &c. Comparing it with *C. eximium* Sl., which it resembles in appearance, size, and impunctate elytra, it differs by head, prothorax, and abdomen having viridescent tints; labrum bisinuate (middle a little advanced); eyes less convex, less prominent, more strongly inclosed at base, lateral spaces of front narrower and more convex behind owing to the deeper, wider, juxta-ocular sulcus, suborbital antennal groove single; prothorax with anterior angles prominent, posterior curve shorter, less oblique, more strongly sinuate on each side of lobe; elytra more flattened on disc, upturned humeral angle more acute.

Tribe **Harpalini.**

Genus **GNATHAPHANUS.**

GNATHAPHANUS WHITEI, n.sp.

♀. Elongate-oval, subdepressed. Black.

Head large (5.3 mm. across eyes). Mandibles short, right one widely rounded at apex. Prothorax transverse (4.3 × 6.3 mm.) with a large anterior area defined by an arcuate transverse line raised above plane of disc and a wide, depressed, basal area; angles obtuse, posterior rounded off. Elytra parallel-oval (11.5 × 7.4 mm.), strongly sinuate on each side of apex, strongly striate; dorsal interstices convex, third and fifth wider than second and fourth, second, fourth, and sixth narrow, pointed at apex, third with seven, shallow, foveiform punctures extending

from striole at base of second interstice to apex. Length, 18.5-20; breadth, 7.7-4 mm.

Hab.—Northern Territory. Type in National Museum, Melbourne. Dedicated to Mr. H. L. White, of Belltrees, N.S.W., the well-known ornithologist, at Mr. J. A. Kershaw's request. Two specimens ticketed "Flooded area, King R., N.T.; W. McLennan; 24.12.15," were sent to me for determination.

Allied to *Gn. vulneripennis* Macl., from Java, but larger. It differs from *Gn. philippensis* Chev., (= *Gn. lariceps* Macl.)* by antennæ with basal joint black; prothorax with wider flattened space near each posterior angle and along sides; elytra with interstices much more convex, summits nitid, third and fifth interstices wider than first, second, and fourth, wider than in *Gn. philippensis*—especially towards apex,—seventh and ninth wider towards apex, punctures of third interstice foveiform, not ranged along third stria towards base, &c.

Genus LECANOMERUS.

LECANOMERUS LUCIDUS, n.sp.

♂. Oval. Prothorax wide, rounded on sides, hardly narrowed to base; basal angles obtuse: elytra ovate, lightly striate; interstices depressed, second without striole at base, third impunctate. Black, nitid; elytra with submetallic greenish reflections in certain lights; femora piceous-brown, tibiæ and antennæ brownish; antennæ with two basal joints testaceous, third joint piceous.

Head moderate (1.1 mm. across eyes); frontal impressions feebly marked, wide, round; eyes round, convex; mandibles prominent, decussate. Prothorax short, transverse (1.5 × 2.2 mm.), widest about middle, much wider across base (2 mm.) than apex (1.3 mm.), subdepressed towards base, lightly and widely declivous on each side anteriorly; basal angles roundly obtuse; base

* I have seen a specimen of *Amblygnathus philippensis* Chev., ticketed "Manila," and have also seen the same species from Celebes and New Guinea; these specimens I cannot differentiate from *Pachauchenius lariceps* Macl., of the mainland of Australia. It therefore seems that *Gn. lariceps* Macl., must be regarded as synonymous with *Gn. philippensis* Chev., which ranges from the Philippine Islands to Tropical Australia.

roundly truncate; margins wide towards base; border narrow; lateral basal impressions obsolete; median line fine. Elytra widely ovate (4×3.3 mm.), hardly wider between humeral angles than base of prothorax, rather sharply widened behind humeral angles, widest about middle, lightly convex; humeral angles subprominent, inner humeral angles subrectangular; striæ lightly impressed on disc, deeper towards apex, sixth and seventh hardly perceptible about middle of their course, ninth with the seriate punctures widely interrupted behind basal fifth. Length, 6.5; breadth, 3.3 mm.

Hab.—Queensland: Innisfail. Type in Coll. Sloane. A single specimen occurred to me in the dense scrub in June.

Differs from all other species known to me by its more shining colour, and wider form; prothorax wider, more rounded on sides, less narrowed to base.

Genus EUTHENARUS.

EUTHENARUS BRUNNEUS, n.sp.

Elongate-oval, convex, not shagreened. Head large, front and clypeus bifoveolate: prothorax subquadrate, strongly punctate across base; basal angles obtuse: elytra oval, strongly striate; second interstice without a stria at base, third unipunctate a little behind middle: tarsi short. Light brown; legs testaceous; antennæ infusate, two basal joints testaceous.

Prothorax broader than long (1.5×1.8 mm.), widest before middle, a little wider across base (1.5 mm.) than apex (1.4 mm.); sides lightly rounded anteriorly, obliquely and lightly narrowed to base: basal angles roundly obtuse; base roundly truncate; margins narrow anteriorly, rather wide towards base; a wide, strongly punctate space across base from side to side; basal foveæ shallow, wide; median line lightly marked. Elytra considerably wider than prothorax (4×2.5 mm.), strongly declivous to sides and apex; inner humeral angles roundly open; striæ deep; inner interstices convex. Prosternum with a few fine setæ before coxæ and on point. Abdomen sparsely setulose, intercoxal fovea wanting. Male with four basal joints of four anterior tarsi dilatate; squamulæ of undersurface sparse, set in

two rows, on anterior tarsi long and near sides of joints; penultimate joint of anterior tarsi emarginate, of intermediate tarsi triangular (in ♀ short, wide, subemarginate), of posterior very small; posterior tarsi with joints successively shorter towards apex, first joint not as long as two succeeding joints together, fifth joint glabrous beneath. Length, 6·5; breadth, 2·5 mm.

Hab.—Tropical Queensland. Types in Coll. Sloane. Specimens occurred to me at King's Plains Cattle Station, on the Upper Normanby River, Cooktown District, in July.

Differs conspicuously from our other species of the genus *Euthenarus* by colour, larger size, more strongly punctate prothorax, also by the want of the basal fovea of the abdomen; this last feature has been given a high importance in recent classifications of the Harpalini, but I do not think its absence outweighs other evidences of affinity, therefore have placed *E. brunnus* in the genus *Euthenarus*.

Tribe **Odacanthini**.

The question, whether Lacordaire's tribes Odacanthides, Ctenodactylides, Trigonodactylides, and Anchonoderides should be recognised as separate tribes, or should be united in one tribe, Odacanthidæ, need not be considered here, for, in the Australian fauna, only the tribe Odacanthini occurs; but I believe that at least the Anchonoderides should be united to the Odacanthini. The position of this tribe is near the Anchomenini; the opening of the inner side of the anterior coxal cavities is single as in the Anchomenini, not double as in the Helluonini and Dryptini. Our species have been distributed (in some cases with doubt) amongst the genera *Odacantha*, *Casnonia*, *Ophionea*, *Lachnotherax*, and *Eudalia*. I now propose to delete the genera *Odacantha* and *Casnonia* from the Australian fauna; the species, which have been assigned to these two genera, are here referred elsewhere. *Odacantha micans* MacL., becomes the type of a new genus, *Basistichus*; and *Casnonia aliena* Pascoe, the type of a new genus, *Clarencia*; *Casnonia obscura* Cast., and *C. amplipennis* Gestro, are referred to *Eudalia*; *C. globulicollis* MacL., *C. riverinæ* Sl., and *L. formicoides* Sl., I have already placed in

Lachnothorax, where they constitute a special group endemic to Australia; (our other species, *L. palustris* Sl., is a typical species of *Lachnothorax*. Cf. Sloane, these Proceedings, 1910, xxxv., p.398).

All the Australian species of the tribe Odacanthini, which I have examined, have had, in the ♂, the anterior tarsi in some degree dilatate, with the three basal joints bearing two oblique rows of squamæ on their undersurface (in some cases, e.g., *Basistichus micans* Macl., these rows of squamæ are weak).* All our species have the apex of the abdomen unisetose on each side in ♂, bisetose in ♀; there is a notch, more or less distinct, in the middle of the apex in ♂ (sometimes this notch may be seen less developed in the ♀, e.g., *Basistichus micans*).

Table of Australian Genera.

- 1(2) Antennæ with third joint sparingly pubescent, basal joint with more than one seta. Tarsi hairy above. (Prothorax short, with distinct lateral margins) *Lachnothorax*.
 2(1) Antennæ with three basal joints glabrous, basal joint unisetose. Tarsi not setose on middle of upper side.
 3(4) Head not constricted behind eyes; neck very wide. *Porocara*.
 4(3) Head more or less constricted behind eyes; neck narrow, often condyliform.

* Lacordaire reports these squamæ in *Casnonia* (Genera, p.73), but G. H. Horn (Trans. Am. Ent. Soc., 1881, p.147) says of the tribe Odacanthini, "The anterior tarsi exhibit no differences in the two sexes." I believe this remark refers to *C. pennsylvanica* Linn., in which I have not been able to detect any squamæ in ♂. Lacordaire says of the genus *Odacantha*, "tarses filiformes, simples dans les deux sexes." I am not sure whether he means by "simples" that the anterior tarsi are without squamæ beneath in ♂, but I have noticed that *O. melanura* Linn., of Europe, has the three basal joints slightly dilatate, with two rows of squamæ beneath in ♂. It may be noted in this connection that I have said, when describing *Lachnothorax palustris*, the anterior tarsi in ♂ "are not dilatate nor clothed beneath"; subsequent examination of the type (♂) showed this statement to be erroneous, for though the anterior tarsi can hardly be said to be dilatate, I have clearly perceived two narrow, feebly-developed rows of squamæ on the under side of the three basal joints; in *L. rivierini*, too, I have seen two narrow rows of squamæ on under side of tarsi in ♂.

- 5(10) Prothorax with well-developed lateral margins. Tarsi with fourth joint not bilobate.
- 6(7) Elytra fully striate, striæ attaining apex. (In *E. obscura* Cast., apex of elytra nitid and faintly striate)..... *Eudalia*.
- 7(6) Striæ of elytra obsolete towards apex.
- 8(9) Head short behind eyes; neck thick. Prothorax lightly ampliate at anterior third; base and apex of about equal width; lateral borders divergent forwards; median line strongly impressed. Elytra with all striæ strongly marked at base; posterior three-fourths nitid, smooth; apex bisinuate truncate..... *Basistichus*.
- 9(8) Head elongate-oblique behind eyes; neck strangulate, very narrow. Antennæ with third joint very long (almost as long as two succeeding joints together), fourth joint raised above fifth at apex on upper side, hardly setose. Prothorax elongate, evidently narrower at apex than at base; lateral borders parallel; disc transversely striolate, median line faint. Elytra with sixth and seventh striæ obsolete, others strongly impressed only on basal third; three rows of fine setiferous pores on each elytron—on third and fifth interstices and at position of seventh interstice. Prosternum, mesosternum, and metasternum strongly punctate..... *Clarencia*.
- 10(5) Prothorax with lateral margins obsolete. Tarsi with fourth joint bilobate *Ophionea*.

Habits.—*Lachnothorax palustris* is common about salt marshes at Cairns; its range extends to the King River, Northern Territory. *L. riverinæ* is found about the edges of freshwater-swamps in the Riverina district of N. S. Wales (Mulwala and Urana). *Porocara*, and the typical species of *Eudalia*, are found on river-sandbanks, or stone-beds (*E. castelnavi*); but I do not know the habits thoroughly of many species of *Eudalia*, though I believe all are riparian species living beside permanent water. *Basistichus micans* is found under logs and débris away from water in Eucalyptus forests of the coastal districts of tropical Queensland. I do not know the habits of *Clarencia* and *Ophionea*, but suppose them to be frequenters of marshy places.

POROCARA, n.gen.

Robust, convex. Head large, punctate; neck short, very thick. Mentum with sinus oblique on sides; median tooth wide, triangular, prominent; lobes obtuse at apex. Ligula corneous;

apex truncate, two long setæ in middle, wide apart, and two setules—one at each angle; paraglossæ cartilaginous, narrow, free, triangular, extending greatly beyond ligula, not incurved. Palpi slender; apical joint elongate, obtuse, of maxillary longer than penultimate joint. Maxillæ slender, hooked. Prothorax not longer than broad, punctate; sides of prosternum rounded, visible from above; a short, thick seta at each anterior angle of pronotum. Elytra strongly punctate-striate; third, fifth, and seventh interstices with a single row of punctures along each—varying in number from six on third interstice to nine on seventh. Apical ventral segment in ♂ emarginate-truncate, unisetose on each side, in ♀ roundly truncate, bisetose on each side. Tarsi: anterior in ♂ lightly dilatate; three basal joints with two rows of rather sparsely set squamæ on under side; posterior with fifth joint not as long as basal joint, nor as two preceding joints together; ungues long and slender. Type, *P. punctata*, n.sp.

The position of this genus in the tribe Odacanthini is near *Eudalia*, but it is quite distinct; the form of the head not narrowed behind the eyes is sufficient to distinguish *P. punctata* from all other Australian allied species.

POROCARA PUNCTATA, n.sp.

Brown; legs, antennæ, and palpi testaceous: each elytron with a large humeral and apical area, connected on sides, more lightly coloured.

Head not narrowed behind eyes (2 mm. across eyes). Prothorax hardly broader than long (2×2.1 mm.); lateral borders converging lightly backwards from just behind apex to basal sixth, then a little out-turned to base. Elytra oval (5×3.7 mm.), convex, strongly crenulate-striate: interstices strongly convex, shagreened, third, fifth, and seventh uniseriate-punctate; apex not truncate, apical curve short, lightly sinuate on each side. Undersurface of head, sterna, and basal ventral segments punctate; fourth ventral segment sometimes punctate in middle, two apical segments glabrous. Length, 9.5; breadth, 3.7 mm.

Hab.—Queensland: Laura (Cooktown railway); Sloane, July, 1916.

Types in Coll. Sloane. I obtained a large number of specimens (many immature) on sandbanks of the Laura River (which had ceased running) beside the railway-bridge at Laura, by flooding the margins of the pools left in the river. It is very active, and, on being driven from its shelter in the sand by water, runs with great celerity, and quickly hides itself again in crevices in the sand.

The colour of the elytra is variable; looking at the elytra from the base, the dark part of the pattern, which varies in colour from brown to piceous, is seen to be a postbasal area covering the four inner interstices, constricted almost to first interstice at basal third, then spreading obliquely outwards and extending over the eighth interstice behind apical third, and forming a wide transverse area above the apical declivity; the apex (widely) and the sides (irregularly) are lighter-coloured; the more lightly coloured parts of the elytra vary from brown to pale testaceous, according to the maturity or immaturity of the specimen examined. The prothorax has a short bristle-like seta at each anterior angle, and another similar, but longer, seta beside the lateral border at widest part, but there is no basal marginal seta. The basal marginal seta is also wanting in all those species of the genus *Eudalia*, which have not the lateral margins of the prothorax plurisetose; the presence of this seta is rare in the tribe.

Genus EUDALIA.

Table of Species.

- 1(10) Head punctate.
- 2(7) Posterior tarsi with fifth joint not as long as basal joint, nor as three preceding joints together.
- 3(6) Elytra setose. Legs and base of antennæ testaceous.
- 4(5) Elytra wholly olivaceous..... *macleayi* Bates.
- 5(4) Elytra olivaceous with apex yellowish..... *latipennis* Mael.
- 6(3) Elytra glabrous. Colour black (including elytra, legs, and base of antennæ..... *castelnau* Sl.
- 7(2) Posterior tarsi with fifth joint very long, longer than basal joint, and than three preceding joints together. (Legs with at least basal part of femora yellowish).
- 8(9) Elytra with interstices sparsely setose..... *nigra* Sl.

- 9(8) Elytra glabrous, excepting for a single row series of setiferous punctures on third, fifth, and seventh interstices..... *obliquiceps* Sl.
- 10(1) Head impunctate, glabrous. (Elytra with discal punctures only on third interstice).
- 11(12) Head with neck condyliform. Prothorax narrow, convex, strongly and closely punctate; median line obsolete. Elytra strongly punctate-striate on basal half. Femora piceous at apex..... *obscura* Cast.
- 12(11) Head with neck not condyliform. Prothorax subdepressed, finely punctate; median line strongly impressed. Elytra finely punctate-striate. Legs unicolorous.
- 13(14) Prothorax not ampliate at anterior third; lateral borders parallel. Prosternal episterna visible from above..... *brunneipennis* Sl.
- *14(13) Prothorax ampliate at anterior third; lateral borders curved outwards at widest part. Prosternal episterna hardly visible from above.
- 15(16) Prothorax punctate near base and apex, not on disc. Elytra nitid..... *nitida* Sl.
- 16(15) Prothorax punctate on disc. Elytra subopaque (shagreened)...
..... *sublævis* Macl.

E. waterhousei Cast., of which no specimen was available, goes beside *E. latipennis* Macl. I have seen it from Central Australia and Port Darwin. *E. froggatti* Macl., is unknown to me in nature; I am not sure of its position in the genus according to the table given above. *Cusnonia amplipennis* Gest., I would refer to *Eudalia*, but I am not sure where to place it.

Note.—In the genus *Eudalia*, the head has a narrow marginal channel extending backwards from each side of the base of the clypeus; in some species (e.g., *E. sublævis*, *E. nitida*, and *E. brunneipennis*) there is another, inner, narrow sulcus (at the extremity of which is the anterior supraorbital seta), and, between these two sulci, there is a narrow carina. The inner sulcus and carina do not occur in the typical species of the genus, but the carina is distinct in *E. nigra*.

EUDALIA OBLIQUICEPS, n.sp.

Elongate, subconvex. Head convex, hardly impressed across base: prothorax narrow, not ampliate behind anterior margin, punctate; lateral borders well-developed; pro-episterna a little rounded and visible from above: elytra wide, lightly convex,

strongly punctate-striate; interstices not shagreened, glabrous, third, fifth, and seventh seriate-punctate: posterior tarsi with fifth joint rather longer than first joint, about as long as three preceding joints together. Black, nitid; femora testaceous with apex black, tibiae more or less ferruginous (base piceous); palpi and basal joint of antennae of a clear ferruginous colour; antennae reddish-piceous, second and third joints ferruginous at apex; labrum piceous.

Head large (1.8 mm. across eyes), gradually obliquely narrowed behind eyes, punctate on each side near eyes, impunctate in middle; neck wide; front lightly and widely bi-impressed; eyes prominent, shortly rounded in front, obliquely rounded behind. Prothorax longer than broad (1.7 × 1.5 mm.), convex; pronotum glabrous, punctate, a smooth space near each anterior angle; base truncate; posterior angles obtuse; lateral borders narrow, lightly oblique to base, gently divergent forward, terminating at anterior angles. Elytra subquadrate with angles rounded (5 × 3.3 mm.), depressed on disc, declivous to base, roundly declivous to sides; base shortly constricted to peduncle, rounded at shoulders; apex shortly rounded, widely subsinuate on each side; striae coarsely punctate; even interstices glabrous, odd ones each bearing a row of small, widely placed, setiferous punctures. Under-surface, excepting three apical ventral segments, punctate. Length, 9.3; breadth, 3.3 mm.

Hab. – Queensland: Cooktown District, Laura (Sloane). Type, unique in Coll. Sloane. One specimen occurred to me under floated débris on the margin of the Laura River, near the railway-bridge.

A very distinct species, in colour and general appearance resembling *E. nigra* Sl.,* but differing by smaller size; head glabrous, much less strongly constricted behind eyes; prothorax far less strongly angustate to apex, lateral channel narrower and not beset with numerous long setae, lateral border narrower, less strongly arcuate; elytra not generally setigero-punctate. It

* Mr. Dodd found *E. nigra* in Queensland, at Townsville, and on the Herbert River.

cannot be *E. froggatti* MacL., (unknown to me in nature), because the elytra are not "minutely punctate on the interstices."

EUDALIA BRUNNEIPENNIS, n.sp.

Elongate, convex, glabrous. Head convex, roundly obliquely but not strongly narrowed behind eyes: prothorax narrow, punctate; pro-episterna roundly swollen and visible from above: elytra oval, punctate-striate; interstices nitid, depressed on disc, third 3-punctate. Head and prothorax black; elytra and under-surface of body brown; legs, antennæ, and palpi ferruginous, mouth-parts reddish.

Head elongate (1.3 mm. across eyes), obliquely narrowed behind eyes, convex, impunctate, nitid; eyes prominent, shortly rounded in front, obliquely rounded behind. Prothorax as long as broad (1.3 × 1.3 mm.), convex, lightly rounded on sides, roundly and decidedly angustate to apex, lightly narrowed to base; pronotum glabrous, convex, punctate—an impunctate space on each side anteriorly; apex truncate; anterior angles touching head; base truncate; basal angles marked, obtuse; lateral channel narrow; lateral border hardly arcuate at widest part, lightly oblique to base, strongly roundly curved to apex, terminating at anterior angle. Elytra oval (4 × 2.7 mm.), convex, declivous to base; striæ well marked; interstices subconvex, third 3-punctate. Undersurface of head and body impunctate, of prothorax punctate. Length, 7.2; breadth, 2.7 mm.

Hab.—Queensland: Kuranda (Dodd); two specimens; type in Coll. Sloane.

Differs from all others by the brown colour of the elytra. In the form of its head and prothorax, it resembles *E. obliquiceps* Sl., but the absence of puncturation on the upper and lower surfaces of the head, on the mesosternum and metasternum, and the basal part of the abdomen decidedly differentiate it from that species, from which it differs also in colour, &c.

EUDALIA NITIDA, n.sp.

Oval. Head glabrous, impunctate, wide, shortly and strongly constricted behind eyes: prothorax narrow, subcordate, lightly ampliate on sides, impunctate except near margins; pro-episterna

not protuberant, hardly visible from above: elytra short, sub-oval, lightly punctate-striate; interstices depressed, glabrous, third 3-punctate. Black, nitid; legs testaceous (tibiæ and tarsi a little darker than femora); mouth-parts and antennæ ferruginous; mesosternum, metasternum, and abdomen brown.

Head wide (1.5 mm. across eyes), lævigata; front bi-impressed between bases of antennæ; submarginal carina near eyes well-developed; eyes large, prominent. Prothorax as broad as long (1.3 × 1.3 mm.), convex, glabrous, very finely transversely striolate, a few punctures along anterior and basal margins and in lateral channel; apex truncate; anterior angles obtuse, slightly distant from neck; sides rounded, strongly narrowed to apex, lightly narrowed to base; basal angles obtuse; lateral borders narrow, reflexed, extending round anterior angles on to sides of apex; lateral channel wide, flat, sharply depressed below plane of pronotum. Elytra subquadrate with angles rounded (4 × 2.75 mm.), subdepressed, declivous to base, lightly declivous to sides; humeral angles rounded, apex shortly rounded, widely subsinuate on each side; striæ finely punctate; interstices glabrous, finely shagreened under a lens; the three setæ of third interstice placed in wide, shallow foveæ. Prosternum punctate. Undersurface of head and body impunctate. Length, 7.5; breadth, 2.75 mm.

Hab.—Queensland: Kuranda (Dodd). One specimen (type) was received from Mr. F. P. Dodd, from Kuranda; and two other specimens were among the duplicates of the Van de Poll Collection, labelled Cooktown.

Allied to *E. sublævis* MacL.,* with which it agrees in facies, impunctate head and undersurface of body; but it differs by prothorax impunctate on disc; elytra more nitid, striæ not strongly impressed, interstices not the least convex, not nearly so strongly shagreened, setiferous foveæ of third interstice less sharply defined, shallower, wider, &c. From *E. brunneipennis* Sl., it differs by colour of elytra; head more strongly and shortly constricted to neck: pronotum not punctate on disc, sides not

* Mr. F. P. Dodd sent me specimens of *E. sublævis* from Port Darwin, and these specimens I have compared with the type in the Macleay Museum.

swollen and visible from above; lateral channel wider; lateral border more arcuate, and passing round anterior angle; elytra wider, shorter, less convex, less strongly striate, &c.

Tribe **Lebiini**.

Group *Sarothrocrepides*.

In his monograph of the Masoreides and Tetrasonoderides (Bull. Soc. Imp. Nat. Mosc., 1876, pp.1-84), Chaudoir indicated a separate group, *Sarothrocrepides*, distinguished from the *Tetrasonoderides* by the bilobate, fourth joint of the tarsi. This character, however, fails in *Lebiomorpha gravis* Blackb., and *L. fragilis* Blackb., so that it seems likely that the group *Sarothrocrepides* may have to be united with the *Tetrasonoderides*.* Be that as it may, I retain, for the present, Chaudoir's group *Sarothrocrepides* for the two Australian genera *Sarothrocrepis* and *Lebiomorpha*. *Ectroma* (Blackburn, 1889) is the same as *Lebiomorpha*, but it is a preoccupied name. Chaudoir's unedited name, *Lebiomorpha*, is, therefore, to be used in its place. Blackburn has dealt very fully with the genus *Lebiomorpha* in Trans. Roy. Soc. S. Aust., 1901, pp.105-110.

Genus **SAROTHROCREPIS**.

Table of Australian Species.

- 1(12) Prothorax with basal angles acute; base truncate on each side and with median lobe prominent.
- 2(11) Elytra with humeral angles not raised or prominent.
- 3(10) Prothorax unicolorous (testaceous).
- 4(5) Elytra with interstices setulose (pattern as in *corticalis*)..... *setulosa* Sl.
- 5(4) Elytra not setulose.
- 6(9) Length 8.5-10 mm.
- 7(8) Elytra testaceous on basal third and with a large ante-apical black area..... *corticalis* Fabr.

* Bedel has regarded the *Tetrasonoderini* as having full tribal value, in his Cat. Raison. Col. du Nord Africa, 1905, p.229; but I think the group is rather a section of the great tribe *Lebiini*. The long tibial spurs, with their outer edge on the lower side serrulate, are characteristic of the *Tetrasonoderides* and *Sarothrocrepides*.

- 8(7) Elytra infusate at base, ante-apical black area extending forward to shoulders along interstices 6-8..... *infusata* Sl.
 9(6) Length 6·7·5 mm., (pattern as in *corticalis*)..... *suavis* Blackb.
 10(3) Prothorax and elytra piceous (or black) with wide testaceous lateral margins..... *luctuosa* Newm.
 11(2) Elytra with humeral angles raised and prominent..... *humerala* Sl.
 12(1) Prothorax with basal angles more or less obtuse; base more or less oblique on each side, median lobe wide, not prominent.
 13(18) Elytra with apical curve short, hardly sinuate on each side.
 14(17) Elytra testaceous on basal half and with a transverse ante-apical black fascia.
 15(16) Ante-apical black fascia wide and continuous across interstices 1-8 *mastersi* MacL.
 16(15) Ante-apical black fascia interrupted on sixth interstice, its lateral parts narrow on interstices 6-8 *pallida* MacL.
 17(14) Elytra with posterior black area extending forward to shoulders on interstices 6-9. Length, 5·6-6 mm..... *blackburni* Sl.
 18(13) Elytra with apical curve gently oblique, decidedly sinuate on each side, apex truncate-emarginate at extremities of three inner interstices *obtusa* Sl.

Note.—*S. dimidiata* MacL., is the only typical Australian species of the genus *Sarothrocrepis* unknown to me in nature. From the description, it is allied to *S. corticalis* Fabr. *S. infusata* Sl., I now look upon as a distinct species. I do not yet know how to differentiate satisfactorily *Lebiomorpha* from *Sarothrocrepis*. Chaudoir named *Lebia benefica* Newm., and *L. civica* Newm., as typical species of *Lebiomorpha*; and Blackburn founded *Ectroma* on *L. civica*. Two extra-Australian species of *Sarothrocrepis* have been described by Jordan, viz., *S. bimaculata* (Sumbawa), and *S. m-nigra* (Tenimber). Cf. Nov. Zool., i., 1894, p.106.

SAROTHROCREPIS OBTUSA, n.sp.

♂. Oval, depressed. Prothorax transverse ($2 \times 3\cdot2$ mm.), rounded on sides; base lightly bisinuate, basal angles obtuse. Elytra oval (7×5 mm.), striate; interstices depressed; apical curve oblique on each side, lightly emarginate at extremity of three inner interstices of each elytron. Testaceous, elytra with three black marks on apical half a little before apex—sutural mark large, triangular; anterior margin (base) extending to outer edge of fifth interstice, excised on second and fourth interstices;

lateral margins oblique, uneven; each lateral mark small, irregular, extending across interstices 6-9, produced backwards on eighth and ninth interstices, divided from central plaga by fifth interstice. Length, 10·5; breadth, 5 mm.

Hab.—North-West Australia. Unique in Coll. Sloane.

One specimen was given to me by Mr. H. M. Giles, of Perth, as from the Drysdale River [west of Cambridge Gulf, about lat. 15°, long. 127°]. Differs from all other described species of the genus by the larger oblique slope of the apical curve of the elytra, and the light sutural emargination opposite the extremities of the three inner interstices; the outer angles of the sutural emargination, though obtuse, are marked.

Group *Lebiides*.

Genus *LEBIA*.

Eulebia Macleay, 1871.

LEBIA MELANOTA Chaudoir.

Bull. Soc. Imp. Nat. Mosc., 1870, p.226. *Eulebia plagiata* MacL., Proc. Ent. Soc. N. S. Wales, ii., 1871, p.87.

Masters, in his Catalogue, furnishes the above synonymy, but gives the preference to Macleay's name. I am not sure which name was published first, but Chaudoir's paper was read several months before Macleay's; in any case, Macleay's name would fail, owing to the previous use of *Lebia plagiata* by Germar.

Hab.—Queensland: Gayndah (Masters); Townsville (Dodd)

LEBIA PICIPENNIS Macleay.

Eulebia picipennis Macleay, Proc. Ent. Soc. N. S. Wales, ii., 1871, p.87. *Lebia papuensis* MacL., Proc. Linn. Soc. N. S. Wales, 1876, i., p.167.

An examination of the type of *L. papuensis* MacL., in the Macleay Museum, in comparison with specimens of *L. picipennis* MacL., from Queensland, compelled me to regard these names as synonymous.

Hab.—Queensland: Gayndah (Masters). New Guinea: Katow (Macleay).

Group *Callidides*.

Genus XANTHOPHŒA.

Table of Australian Species.

- 1(16) Antennæ with third joint sparsely pubescent. (Tarsi with upper surface plurisetose).
- 2(11) Elytra with third interstice (sometimes also fifth) with two or more punctures.
- 3(4) Elytra with third and fifth interstices seriate-punctate.....
..... *infuscata* Chaud.
- 4(3) Elytra with only third interstice punctate.
- 5(9) Apex of abdomen in ♂ with six or more setæ, in ♀ plurisetose.
- 6(10) Elytra with black vittæ.
- 7(8) Orbits oblique behind eyes. Sutural black vitta of elytra reaching base. Length, 13 mm. *grandis* Chaud.
- 8(7) Orbits tumid behind eyes. Sutural black vitta not extending forward past scutellar striole. Length, 10 mm. *loweri* Blackb.
- 9(6) Colour reddish-piceous *suturata* Newm.
- 10(5) Apex of abdomen in ♂ with one, in ♀ with two setæ on each side *elongata* Sl.
- 11(2) Elytra with third interstice unipunctate towards apex.
- 12(15) Elytra testaceous, with three black vittæ.
- 13(14) Prothorax transverse, widest before middle, strongly sinuate on sides posteriorly. Elytra with interstices coarsely punctate; lateral vitta extending over interstices 6-8. Length, 8.9-5 mm.
..... *vittata* Dej.
- 14(13) Prothorax widest at middle, hardly subsinuate on sides posteriorly. Elytra with interstices minutely punctate; lateral vitta almost wholly confined to seventh interstice. Length, 11-13 mm. *ornata* Sl.
- 15(12) Elytra testaceous, a postmedian fascia from side to side (diamond-shaped at suture); ninth interstice to apical third, and margin of apical curve black *fasciata* Sl.
- 16(1) Antennæ with three basal joints glabrous—except for usual distal setæ.
- 17(38) Tarsi with upper surface setulose.
- 18(19) Elytra with third and fifth interstices punctate. (Form narrow, colour ferruginous. Apex of abdomen in ♂ 3-setose on each side) *angusticollis* MacL.
- 19(18) Elytra with only third interstice punctate.
- 20(31) Apex of abdomen in ♂ with three or more setæ on each side, in ♀ plurisetose.

- 21(24) Form comparatively wide; prothorax ampliate before middle. Elytra with disc reddish or ferruginous and a lateral and apical area infusate; interstices punctulate, eighth and ninth coarsely so.
- 22(23) Head and prothorax punctate; lateral margins of elytra wide, depressed..... *ruriabilis* Mael.
- 23(22) Head and prothorax impunctate; lateral margins of elytra narrow..... *marginipennis* Sl.
- 24(21) Form narrow, prothorax not ampliate on sides. Colour reddish, apex of elytra sometimes reddish.
- 25(30) Prothorax with basal angles obtuse.
- 26(29) Head oblique, not tumid, behind eyes.
- 27(28) Prothorax evidently narrowed to base, sides lightly rounded at anterior marginal puncture, sinuate posteriorly. Elytra with third interstice unipunctate near apex... *tweedensis* Blackb.*
- 28(27) Prothorax not perceptibly narrowed to base, sides straight. Elytra with third interstice bipunctate..... *quadrifollis* Sl.
- 29(26) Head tumid behind eyes..... *cylindricollis* Blackb.
- 30(25) Prothorax with basal angles acute, or subacute, sharply marked..... *ferruginea* Chaud.
- 31(20) Apex of abdomen in ♂ with one, in ♀ with two setae on each side.
- 32(33) Prothorax straight on sides, widest at basal angles. (Elytra reddish-brown with apex red)..... *doddi* Sl.
- 33(32) Prothorax rounded on sides, evidently narrowed to base.
- 34(37) Prothorax with sides straightened or subsinuate posteriorly; basal angles not prominent.
- 35(36) Elytra piceous with apex red..... *apicalis* Sl.
- 36(35) Elytra ferruginous with margins (widely on basal half of sides, narrowly at apex) and first interstice black..... *nigricincta* Sl.
- 37(34) Prothorax with sides ampliate before middle, strongly sinuate posteriorly; basal angles acute, prominent. (Elytra piceous, with three inner interstices ferruginous except at apex)... *dorsalis* Sl.
- 38(17) Tarsi with upper surface glabrous.
- 39(40) Apex of abdomen plurisetose. Prothorax evidently narrower at base than apex; basal angles obtuse, near peduncle. Elytra with third interstice bipunctate. Testaceous, striae of elytra infusate..... *brachinoderus* Chaud.
- 40(39) Apex of abdomen in ♂ with one, in ♀ with two setae on each side. Prothorax wider at base than apex; basal angles subrectangular, marked. Elytra with third interstice unipunctate. Elytra black, with interstices 5-7 and marginal channel testaceous..... *plagiata* Germ.

* Described as a species of *Demetrias*.

Notes on species omitted from the above Table.

X. brachinoderus Chaud., (*Demetrius*) is a well-known, large, testaceous species, with which *X. pallida* Olliff, is conspecific.

Cymindis longicollis Macl., is a species of *Xanthophœa* allied to *X. ferruginea* Chaud.; the type has the third elytral interstice unipunctate, only the type-specimen in the Macleay Museum is known, as yet.

Xanthophœa chaudoiri Macl., has the third interstice of the elytra tripunctate, from type. It has not been found since Masters got the original specimens at Gayndah.

The following species named by Chaudoir have not yet been identified by me:—*X. angustula* (very near *X. infuscata* Chaud.); *X. lineolata*; *X. parallela* (very close to *X. ornata* Sl.); *X. picipennis* (very near, and perhaps not different from *X. suturata* Newm.); *X. pilosula*.

X. lissodera Chaud., I look upon as conspecific with *X. vittata* Dej.

X. rufescens Macl., (*Demetrius*) is closely allied to *X. ferruginea* Chaud., but I do not feel convinced it is the same.

X. filiformis Blackb., *X. satelles* Blackb., *X. concinna* Blackb., and *X. constricticeps* Sl., are species of which specimens have not been available for reference when compiling this table.

XANTHOPHŒA MARGINIPENNIS, n.sp.

Elliptical, depressed. Head lævigata, a little tumid behind eyes; antennæ with three basal joints glabrous: prothorax cordate: elytra lightly obovate, crenulate-striate; interstices punctulate, first interstice with an elongate stiole at base, third tripunctate, tarsi setose on upper surface. Ferruginous, elytra with disc lighter-coloured than head and prothorax, seventh, eighth, and ninth interstices and apex piceous.

Head elongate (1.85 mm. across eyes), depressed, impunctate; front widely impressed on each side; sides strongly obliquely constricted to neck: posterior supraorbital seta in a foveiform depression just behind base of eye. Prothorax hardly wider than head with eyes, a little broader than long (1.75 × 2 mm.), slightly narrower across base than apex; disc lævigata, depressed,

a wide subdepressed space along sides forming a wide concavity posteriorly; apex lightly emarginate; anterior angles not marked or protuberant; sides ampliate and rounded anteriorly, strongly sinuate posteriorly, straight before basal angles; base truncate, sloping obliquely forward on each side to angles, these marked but obtuse; lateral channel wide, border narrow, slightly reflexed; median line deep. Elytra depressed, widest behind middle (5×3.6 mm.); sides lightly rounded; apex truncate; external angles well-marked, obtuse at summit; interstices 2-7 finely and sparsely punctate, eighth and ninth coarsely punctate; lateral channel wide, punctate. Length, 9; breadth, 3.6 mm.

Hab.—Northern Territory: Port Darwin (Dodd). Two specimens in Coll. Sloane.

Allied to *X. variabilis* MacL., from which it differs by head and disc of prothorax not punctate; puncturation of elytral interstices much finer; head more elongate, tumid behind eyes, posterior supraorbital seta in a depression, eyes a little less prominent; prothorax longer, narrower, apex less emarginate, anterior angles nearer sides of head, sides less strongly rounded anteriorly, less strongly sinuate posteriorly, hardly the least out-turned to basal angles, these not acute and prominent; elytra with marginal channel narrow, external angles more strongly marked, &c.

XANTHOPHŒA QUADRICOLLIS, n.sp.

♀. Elongate. Prothorax depressed, subquadrate, hardly narrowed to base; base truncate, wider than apex: elytra truncate-oval, striate; interstices depressed near suture, lightly convex near sides, first interstice with an elongate stria at base, third bipunctate: apex of abdomen with four or five setæ on each side. Brownish-red; elytra a little darker than head and prothorax; undersurface of body and femora testaceous, of head and prothorax reddish.

Head large (1.7 mm. across eyes), lightly oblique behind eyes; front depressed, lightly bi-impressed; antennæ with three basal joints glabrous. Prothorax hardly wider than head (1.7×1.9 mm.), lævigata; apex truncate; anterior angles rounded, not

marked: sides lightly ampliate behind anterior angles, almost straight on posterior two-thirds; base emarginate above peduncle; basal angles obtuse but marked; lateral margins wide, depressed; border a little upturned. Elytra much wider than prothorax (6×3.3 mm.), subdepressed, declivous to sides: apex with outer angles marked; apical truncature lightly and widely bisinuate: striae simple; interstices nitid, a row of minute punctures along every one (under a lens); anterior puncture of third at anterior fourth, posterior puncture at apical fifth. Length, 10.5; breadth, 3.3 mm.

Hab.—Queensland: Kuranda (Dodd). Unique in Coll. Sloane.

Allied to, and resembling *X. tweedensis* Blackb., but differing by prothorax more depressed, lateral margins wider, sides straight posteriorly and more strongly narrowed to apex, basal angles far less sharply marked, base much more strongly bisinuate on each side; elytra with third interstice bipunctate, abdomen in ♀ with fewer setae at apex.

XANTHOPHGEA DODDI, n.sp.

Narrow, elongate, depressed. Head large, convex: prothorax narrow, parallel, widest at base: elytra subparallel on sides, widest behind middle, truncate at base, widely margined, striate; interstices lightly convex, first interstice with a short, lightly impressed striole at base, third unipunctate about apical fifth: abdomen in ♂ with one, in ♀ with two setae on each side of apex: anterior tarsi in ♂ a little dilatate, clothed beneath with ashen-coloured squamæ—squamæ arranged in two mesial rows, with a fringe on outer side on three basal joints, fourth joint bilobate, and clothed beneath (also in posterior tarsi) with a cinereous hair-pad. Brownish-red; elytra darker than head and prothorax, apex of elytra a lighter and brighter red; undersurface of body and femora testaceous, of head and prothorax reddish.

Head wider than prothorax (1.5 mm. across eyes), obliquely narrowed behind eyes, lævigata; front lightly impressed on each side; antennæ with three basal joints glabrous. Prothorax subquadrate (1.4×1.3 mm.), nitid, more or less transversely striolate especially towards sides; apex subemarginate; anterior angles sub

prominent, narrow, obtuse; sides not ampliate behind anterior angles, subangulate at anterior third, almost straight on anterior two-thirds, a little out-turned to basal angles; base truncate; basal angles strongly marked, rectangular (obtuse at summit); lateral margin wide, depressed, a little concave near base. Elytra lævigata, about twice as wide as prothorax (5×2.7 mm.), rather depressed, declivous to sides; apex with outer angles rounded; apical truncature lightly bisinuate; striae simple. Length, 8.9.5; breadth, 2.7 mm.

Hab.—Queensland: Kuranda (Dodd). Four specimens received from Mr. F. P. Dodd. Type in Coll. Sloane.

This species has the prothorax proportionately narrower than any other, and actually wider across the base than anywhere else, characters which differentiate it from all its congeners. It may be noted that the slightly out-turned basal angles are more prominent in ♂ than in ♀. It resembles *X. quadricollis* Sl., but can be readily distinguished by ♀ with only two (not four or five) setæ on each side of apex of abdomen; the prothorax is somewhat similar in shape, but less narrowed to apex, and with posterior angles more prominent and more sharply marked, &c.

XANTHOPHŒA APICALIS, n.sp.

♂. Elongate, convex. Head large: prothorax truncate-cordate, lightly convex, widest before middle, decidedly narrowed to base; apex and base of equal width; lateral margins narrow: elytra truncate oval, punctate-striate; interstices depressed, first interstice with a faintly marked elongate stria at base, third unipunctate about apical fourth: apex of abdomen unipunctate on each side: tarsi with upper surface glabrous (not more than one or two setæ on upper side of each joint). Head and prothorax reddish; elytra piceous with apical third dull red; abdomen reddish; femora and mouth-parts testaceous; antennæ ferruginous, two basal joints testaceous.

Head wider than prothorax (1.6 mm. across eyes), lævigata, obliquely narrowed behind eyes, transversely impressed behind orbits; front decidedly impressed on each side; eyes convex, prominent; antennæ with three basal joints glabrous. Prothorax

a little broader than long (1.25×1.45 mm.), widest before middle, convex, nitid, impunctate; apex truncate; anterior angles near head, not marked; sides rounded anteriorly, subsinuate posteriorly; base lightly bisinuate; basal angles subrectangular, obtuse at summit; marginal channel wide, not explanate, deep and foveiform at base; border narrow, reflexed, subangulate and bearing anterior marginal seta a little before middle; median line strongly impressed. Elytra almost twice as wide as prothorax (4.3×2.7 mm.), convex; humeral angles rounded; interstices nitid, with a row of minute punctures along middle (under a strong lens), three inner striæ obsolescent near base. Length, 7.5; breadth, 2.7 mm.

Hab. — Queensland: Kuranda (Dodd). Unique, in Coll. Sloane.

Allied to *X. nigricincta* Sl.; head and prothorax of similar form (*X. nigricincta* also has apex of abdomen in ♂ unipunctate on each side); but differing by colour, prothorax wider and shorter, basal angles more marked, lateral basal foveæ deeper and longer; external angles of elytra less widely rounded, &c.

XANTHOPHCEA DORSALIS, n.sp.

♀. Narrow, elongate. Prothorax strongly sinuate posteriorly; basal angles prominent, acute: elytra crenulate-striate; interstices convex, finely punctulate, first interstice with a strongly marked striole at base, third unipunctate at apical fifth. Head and prothorax ferruginous; legs, antennæ, mouth-parts, and metasternum yellow; elytra piceous, with a wide, testaceous, sutural area, abdomen piceous.

Head wide (1.1 mm. across eyes), lightly obliquely narrowed behind eyes; orbits not swollen behind eyes; vertex lævigatæ; front with an irregular impression on each side; eyes large; antennæ with three basal joints glabrous. Prothorax hardly as wide as head with eyes (1×1.05 mm.), subdepressed, transversely striolate on each side; disc nitid, impunctate; apex truncate; anterior angles widely rounded; sides roundly ampliate on anterior two-thirds, strongly sinuate posteriorly, out-turned to basal angles, these acute; base truncate on each side, median part widely and lightly rounded; a wide, subdepressed space

along each lateral margin, becoming wider and deeper on basal third; border wide, reflexed; median line strongly impressed. Elytra parallel (3.5×1.7 mm.). Abdomen with apex bisetigerous on each side. Tarsi with upper side glabrous (not more than one or two setæ on upper side of each joint). Length, 5.5; breadth, 1.7 mm.

Hab.—Northern Territory: Port Darwin (Dodd). Unique, in Coll. Sloane.

A thoroughly distinct species, differing from all others by its small size, and the pattern of the elytra, which are piceous, with an elongate, testaceous, dorsal area not reaching apex; the testaceous, dorsal area extends across the three inner interstices at the base, but spreads over the fourth as well, for most of its length; the puncture of the third interstice is on the pale, dorsal area.

Group *Coptoderides*.

DOLICHOCHTIS TETRASTIGMA Chaudoir.

Ann. Soc. Ent. Belg., xii., 1869, p.248. *Mochtherus macleayi* Sl., Proc. Linn. Soc. N. S. Wales, 1907, xxxii., p.377.

Mochtherus macleayi Sl., is a species of *Dolichochtis*, which I identify with *D. tetrastigma* Chaud., from Celebes.

Hab.—Celebes (*vide* Chaudoir); New Guinea; Queensland, Kuranda (Dodd), Normanby River (Sloane).

Genus PLATIA.

PLATIA FROGGATTI Macleay.

Philophlæus froggatti Macleay, Proc. Linn. Soc. N. S. Wales, (2), iii., 1888, p.455.

I consider *Ph. froggatti* Macleay, to be a species of *Platia*. Mr. F. P. Dodd sent me specimens from Port Darwin.

PLATIA QUEENSLANDICA, n.sp.

Oval, depressed. Piceous-black; elytra variegated with numerous yellowish stripes and longitudinal maculæ; lateral channel, border, extreme apex, and apical extremity of first interstice yellowish; labrum and legs brown.

Head large, punctate, longitudinally rugulose near eyes. Prothorax short, transverse, widest about anterior third (at position

of anterior marginal seta), punctate, apex truncate (subemarginate); angles widely rounded, distant from neck; base hardly as wide as apex, shortly sublobate, angles marked, obtuse at summit; sides lightly rounded anteriorly, oblique posteriorly; lateral margins wide, depressed; median line strongly impressed. Elytra wide, subquadrate; base truncate; humeral angles rounded; striae lightly impressed; interstices depressed, finely and closely setulose-punctate. Length, 5·2; breadth, 2·5 mm.

Hab.—Tropical Queensland: Kuranda (Dodd); Normanby River (Sloane). I found this species at King's Plains Station, 43 miles south west from Cooktown, beneath loose bark on a river-gumtree (*Eucalyptus* sp.) in July.

I consider this to be a species of *Platia*; and that *Agonochila minima* Macl., (= *A. litterata* Chaud), *Philophlaeus froggatti* Macl., and *Agonochila lineella* Sl., (from New Guinea) should also be placed in the genus *Platia*. *P. queenslandica* is closely allied to *Agonochila lineella* Sl., from which it differs chiefly in the pattern of the elytra. In *P. papuana* (nom. nov. for *P. lineella* Sl., preoccupied) the third, fifth, seventh, and eighth interstices are occupied by yellow stripes, which all extend beyond the middle of the elytra, and there are nine other maculae on the elytra (two each on the second, sixth, and eighth interstices, and one each on the third, fifth, and seventh); in *P. queenslandica*, the fifth, seventh, and eighth interstices have basal stripes which do not extend behind the middle, and there are thirteen narrow maculae defined in all cases by the striae, which are black, viz., two each on the second and sixth interstices, three each on the third and fourth interstices, and one posterior macula on each of the fifth, seventh, and eighth interstices.

Genus PHLÆOCARABUS.

PHLÆOCARABUS ANCHORALIS, n.sp.

Oval, depressed. Prothorax transverse, widest about middle (a little behind anterior marginal seta); basal margin truncate (a little oblique on each side, lightly curved backwards in middle); elytra much wider than prothorax, striate; interstices subconvex, minutely punctate, third interstice bipunctate. Tarsi with

penultimate joint entire. Head and prothorax (including under-surface) reddish-brown: pronotum with wide testaceous lateral margins; elytra of a light testaceous colour, with a postmedian irregular black fascia (black area occupying about one-third of elytra, anchor-shaped, reaching forward to the scutellum along first interstice and extending forward considerably on each elytron on interstices 6-8); metasternum testaceous; abdomen somewhat infuscate; femora pale testaceous, tibiæ, tarsi, and antennæ ferruginous.

Head (1.4 mm. across eyes), finely punctate; front depressed: vertex declivous to occiput (especially near eyes); a slightly raised longitudinal carina beside each eye; eyes large, hemispherical; orbits laminate, truncate behind eyes. Prothorax transverse (1.15 × 1.63 mm.); disc rather convex, rugulose, minutely punctate under a lens; margins wide, flat, explanate at basal angles; sides rounded off from just behind anterior marginal seta to apex, very slightly obliquely narrowed to base; apex truncate-emarginate: base much wider than apex, basal angles subrectangular (not prominent or acute, summit obtuse). Elytra subquadrate with angles rounded (4 × 2.7 mm.), much wider at base than prothorax; base emarginate behind peduncle, widely rounded on each side; sides lightly rounded; striæ simple, strongly impressed, seriate punctures of ninth large, not widely interrupted in middle. Anterior tarsi in ♂ squamulose beneath four, intermediate beneath first two joints. Length, 6.3-7: breadth, 2.6-2.7 mm.

Hab.—Queensland: Kuranda (Dodd), Cooktown District (Sloane). Type in Coll. Sloane. The type-specimen occurred to me under loose bark on the trunk of a river-gumtree (*Eucalyptus* sp.) on the banks of the upper Normanby River at King's Plains cattle-station in July, 1916.

Differs conspicuously from its nearest allies (e.g., *Ph. nigricollis* Macl., and *Ph. farinæ* Blackb.) by not having the basal testaceous area of the elytra divided from the sides by a black stripe along sixth and seventh interstices. Though its elytral pattern is peculiar to itself, its general appearance resembles that of *Ph. semivittatus* Macl.; but *Ph. semivittatus* is isolated in the genus

by the form of its prothorax, which is wide towards base, with obtuse basal angles.

Group *Cymindides*.

As far as the Australian fauna is concerned, the Cymindides may be defined briefly as follows:—

Head convex between eyes, postocular prominences large; mesosternum wide and oblique between intermediate coxæ; labial palpi securiform in ♂; tarsi with fourth joint not bilobed, claws usually pectinate (simple in *Phlæocarabus unimaculatus* Blackb.).

The Australian genera of the Cymindides are *Anomotarus*, *Lithostrotus*, and *Nototarus*.

Genus ANOMOTARUS.

For the present, all the Australian Cymindides which are characterised by having the following characters may be put in Chaudoir's genus *Anomotarus* (1875). Antennæ with three basal joints glabrous; mentum with median tooth; metepisterna elongate. As thus constituted, *Anomotarus* would include *Urea* (Fauvel, 1882).*

ANOMOTARUS HUMERALIS, n.sp.

Narrow, depressed. Prothorax elongate-cordate, widest about anterior fourth; base strongly sinuate on each side; posterior angles subprominent; elytra oval, not covering apex of abdomen, crenulate-striate; interstices lightly convex, first wide at base and with a well-marked elongate striole, third bipunctate; labial palpi with apical joint in ♂ widely securiform; in ♀ stout, truncate, not securiform. Black; elytra with a testaceous humeral macula on sixth and seventh interstices, ninth interstice and marginal channel, in middle of sides, and a small ante-apical macula on second or second and third interstices testaceous; undersurface piceous; legs and metasternum testaceous; antennæ ferruginous.

Head convex, opaque, punctate between eyes; front lightly

* Taking *Anomotarus* in the sense indicated above, the following described Australian species would come into the genus—*Cymindis æneus* Macl., (? = *C. illawarrae* Macl.) = *Anomotarus olivaceus* Chaud.; *Dromius crudelis* Newm.; *Diabaticus minor* Blackb.; *D. tumidiceps* Blackb.; *Phlæocarabus unimaculatus* Blackb.; *Ph. umbratus* Blackb.

obliquely impressed on each side near antennæ; eyes with orbits reniform, eyes convex, orbits protuberant behind eyes, less than half the size of eyes. Prothorax hardly broader than long (1.2×1.25 mm.); pronotum opaque, transversely striolate, closely punctulate; apex truncate-emarginate; anterior angles obtuse, advanced; sides lightly arcuate, subsinuate before basal angles; base rounded in middle, roundly sinuate on each side; basal angles marked, summit obtuse, unisetigerous; border narrow anteriorly, raised at basal angles; median line well-marked, stronger and reaching base posteriorly. Elytra much wider than prothorax (3.2×2.25 mm.), widest rather behind middle, hardly narrowed to base; base emarginate, widely rounded at shoulders; apex a little roundly truncate, lightly subsinuate on each side, lateral margin explanate (formed by the subdepressed ninth interstice and wide depressed marginal channel). Tarsi with claws denticulate on basal half: in ♂, anterior without squamules beneath joints 1-4. Length, 6; breadth, 2.25 mm.

Hab.—Queensland: Cooktown District. Several specimens occurred to me under leaves and débris in dry situations in the open Eucalyptus-forest at King's Plains Station, south-west from Cooktown, in July.

A. humeralis is congeneric with *Cymindis stigmula* Chaud., (India and New Caledonia) on which Fauvel founded the genus *Uvea*, but I cannot differentiate it generically from *Anomotarus*; and I think, therefore, that *Uvea* (I have examined *U. stigmula* from India) is not more than, at most, a subgenus of *Anomotarus*. Chaudoir had intended to formulate a group Dromiides, to which he would have referred his *Cymindis stigmula*,* but to me it seems truly a member of the group Cymindides

ANOMOTARUS RUFICORNIS, n.sp.

Oval, depressed. Prothorax subcordate: elytra obovate, striate (striae finely crenulate); interstices hardly convex, first wide at base and with a short, well-marked stria: tarsi with claws serrate. Black, elytra brown; undersurface piceous; metasternum, legs, and antennæ testaceous.

Head convex, front decidedly obliquely impressed on each

* Cf. Bull. Soc. Imp. Nat. Mosc., 1875, p.61.

side near antennæ; eyes subprominent; orbits protuberant behind eyes, about half length of eyes. Prothorax broader than long (0.8×1 mm.), widest at anterior fourth; pronotum very finely transversely striolate, not punctulate; apex emarginate; anterior angles widely obtuse, hardly advanced; sides rounded, subsinuate before basal angles; base rounded in middle, strongly sinuate on each side; basal angles marked, summit obtuse, uni-setigerous; border narrow anteriorly, wide and raised at basal angles; median line lightly impressed on disc, strongly impressed towards base. Elytra ovate (2.3×1.85 mm.), widest about apical third; base wide, emarginate behind peduncle, widely rounded on each side; apex wide, rounded, subsinuate on each side: lateral margin not explanate. Length, 4.5; breadth 1.85 mm.

Hab.—Northern Territory: Darwin (Dodd). Unique, in Coll. Sloane.

Allied to *A. humeralis* Sl., but differing by size smaller; prothorax shorter, wider, upper surface not punctulate; elytra wider, more narrowed to base, lateral channel narrower, striæ more finely crenulate, scutellar striae shorter; antennæ lighter-coloured; elytra without humeral and apical maculæ, &c.

NOTOTARUS PUNCTICOLLIS, n.sp.

♂. Oval, depressed. Head large, finely punctate, except on occiput: prothorax short; pronotum punctate: elytra truncate-oval, punctate-striate; interstices lightly convex, shagreened, minutely punctate. Black; elytra opaque; antennæ, coxæ, tibiæ, and tarsi ferruginous.

Head large (1.7 mm. across eyes), convex; upper surface covered with a fine puncturation, except near posterior margin; clypeus convex, minutely punctate, a narrow ferruginous border along apex; eyes round, convex; postocular part of orbits large, prominent, inclosing eyes at base. Prothorax hardly wider than head (1.15×1.8 mm.), subconvex, widest about half-way between anterior and posterior angles; sides lightly rounded, subsinuate just before posterior angles; apex very lightly emarginate; anterior angles widely rounded; posterior angles subacute, not prominent; basal curve rounded in middle, lightly and

widely sinuate on each side; border narrow, rather widely reflexed at posterior angles. Elytra widely oval (3.8×2.7 mm.); base emarginate in middle; shoulders rounded; apex lightly excised at suture, inner angles obtuse, outer angles rounded off; striae finely punctate; interstices lightly convex on disc, third bipunctate; border narrow, decidedly reflexed towards base. Length, 7; breadth, 2.7 mm.

Hab.—Northern Territory. Type in National Museum, Melbourne.

A single specimen is in the National Museum, Melbourne, ticketed "King River, N.T.; W. McLennan; 4.1.16; caught in tent." Allied to *N. morosus* Sl., but differing by size larger; femora black; prothorax proportionately smaller with wider borders, pronotum with whole surface densely and coarsely punctate, &c. *Cymindis crassiceps* MacL., which is a species of *Noto-tarus*, is not available for comparison, but *N. puncticollis* does not agree with the description, *e.g.*, head not "entirely and closely covered with long striae," pronotum not "with small punctures and fine transverse striae."

Tribe **Helluonini.**

HELLUODEMA BRUNNEUM, n.sp.

Parallel. Ferruginous-brown.

Head as in *H. unicolor* Hope, as wide as prothorax (2.6 mm. across eyes). Prothorax longer than broad (3×2.6 mm.), narrower at base than apex, widest before middle, hardly narrowed to apex, lightly angustate to base; sides very lightly rounded, lightly sinuate to base; surface punctate. Elytra parallel (6.5×3.5 mm.), strongly striate; interstices convex, biseriately punctate. Length, 12-14; breadth, 3.2-3.5 mm.

Hab.—Northern Territory. Type in National Museum, Melbourne. Two specimens have been examined, ticketed "Flooded area King R., N.T.; W. McLennan; 24.12.15"; one of these was presented to me from the National Museum, and is in my collection. *H. brunneum* differs from *H. unicolor* Hope, (which has also been found at East Alligator River, N.T.) by its reddish-brown colour, legs ferruginous; prothorax more elongate, less rounded on sides, less decidedly narrowed to base.